## ABSTRACT

A system for converting the MPEG2 compressed picture information into the MPEG4 compressed picture information, the processing volume and the capacity of the video memory needs to be diminished. To this end, the system includes a MPEG2 picture information decoding unit 19 for decoding the interlaced picture using only low 4×4 DCT coefficients of 8×8 DCT coefficients of a macroblock making up the MPEG2 compressed picture information by interlaced scanning, a scanning conversion unit 20 for selecting one of the first and second fields of the interlaced picture decoded by the MPEG2 picture information decoding unit 19 for generating a progressive-scanned picture, a decimating unit 21 for decimating the picture generated by the scanning conversion unit 20 and an encoding unit 22 for encoding the picture decimated by the decimating unit 21 to the MPEG4 compressed picture information.